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ABSTRACT

This study examined teacher candidate classroom assessment practices from the perspective of supervising teachers. Using questionnaires, supervising teachers evaluated the student interns' use of various assessment techniques and interns' methods for determining whether they had achieved a direct impact on their students' learning. Participants were 106 prekindergarten through grade 12 teachers who served as supervising teachers for full-time interns (student teachers) from a college of education during the 2000-2001 academic year. The number of experiences each participant had with student teachers ranged from 1 to 9. Findings show that, on the whole, the supervising teachers believed that their interns had good assessment skills and used a variety of evaluation techniques. Informal methods such as oral questioning and guided practice seemed to be the most frequent assessment methods used in the attempt to demonstrate an effect on student learning. However, data on the predominance of informal methods suggest that these may not be sufficient to prepare teachers to assess student learning effectively. Additional and more sophisticated training may be required. (Contains 3 tables and 10 references.) (SLD)

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Classroom Assessment Practices: Examining Impact on Student Learning

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Faced with escalating pressure to raise standards, educators on all fronts are reexamining ways to increase learning in the classroom. One area in particular that is emerging in importance is the expanded, comprehensive use of assessment by classroom teachers (Black & Wiliam, 1998; Stiggins, 1999). For instance, standards set by the National Council for Accreditation on Teacher Education (NCATE) and affiliated learned societies require that teacher preparation programs demonstrate how their teacher candidates are impacting P-12 student learning (NCATE, 2001). This focus, in turn, requires each program to take a hard look at the assessment practices and perspectives its teacher candidates apply in the classroom. Such examination is particularly important given the consensus among educational researchers that assessment is an area that has been neglected in the past by educators (Stiggins, Frisbie, & Griswold, 1989). For example, Stiggins and Conklin (1988) found that teachers were likely to spend almost one-third of their professional time on activities linked to assessment (Stiggins, 1989), even though research has shown that teachers often have inadequate measurement and assessment skills (Stiggins, 1991; Wise, Lukin & Roos, 1991).

According to the *Principles and Indicators for Student Assessment Systems* devised by the National Forum on Assessment and endorsed by over 80 national and local educational and civil rights organizations, the primary

purpose of assessment is to improve student learning (Neill, 1997). If increased student learning is the goal of assessment, then student evaluation over time is critical. Teachers need to keep track of student learning on an ongoing basis and use this information to modify and plan for instruction. This approach contrasts with the typical, more summative view of assessment in which assessment only occurs once instruction is completed. Unfortunately, however, many teachers feel they have not been properly trained to deal with the assessment demands in the classroom, and preparation programs often do not offer specific courses in this area (Wise, et al., 1991). This is frequently the case, even though numerous studies show that formative assessment properly conducted on a continuing basis by teachers in the classroom actually leads to increased learning and higher standards (Black & Wiliam, 1998).

Given the need for a strong background in formative assessment, we wanted to know the level of preparation of our teacher candidates. This study examined candidate assessment practices from the perspective of their supervising teachers. Using questionnaires, supervising teachers evaluated the student interns' use of various assessment techniques and interns' methods for determining whether they had achieved a direct impact on their students' learning.

Method

Participants

Participants were 106 (59%) of the 181 P-12 teachers who served as supervising teachers for full-time interns (student teachers) from a college of

education at one southeastern university during the 2000-2001 academic year. Of the participants who volunteered self-descriptive information, 40 were elementary teachers and 54 were secondary teachers; 78 were female and 13 were male. Teaching experience ranged from 3-31 years (mean = 15 years), and number of experiences with student teachers ranged from 1-9. The sample included 66 European Americans, 9 African Americans, and 6 teachers of other ethnic backgrounds.

Procedures

Questionnaires were distributed to all mentor teachers at the end of the semester in which they had supervised an intern with a cover letter from the Dean of the college requesting their assistance. An envelope addressed to the first author was provided for return of the questionnaires.

Instrument

The instrument was a three-page questionnaire. Questions included Likert-type ratings of the interns' skills related to formative assessment, a list of assessment techniques for which teachers rated interns' frequency of use, and an open-ended question about the methods the intern used to demonstrate his/her impact on student learning. Optional self-descriptive information was also requested. Prior to dissemination, the questionnaire had been piloted with five supervising teachers from previous years and then modified for focus and clarity based on their oral and written feedback.

Results

Skill Ratings

Mean responses to the items rating the assessment skills of interns are presented in Table 1. These findings show that respondents were positive about the interns' ability to use assessment for documenting and monitoring student learning, for modifying instruction, for providing feedback, and for determining whether lessons were effective in attaining instructional goals. Mean scores on each item fell at or above the "agree" level (4.0). Further evidence of the strength of these favorable responses was found through inspection of the frequencies for each response, which indicated that 19 or fewer responses (18%) fell in the undecided or disagree ranges on all five questions. The data showed no significant differences between ratings of elementary and of secondary interns using t-tests on means with the Bonferroni method for multiple comparisons.

Use of Assessment Techniques

Ratings by supervising teachers of intern use of 13 assessment techniques showed that the most frequently used techniques were informal oral questions and guided practice (see means in Table 2). Frequent use of both methods was reported for at least 85% of the interns. Least used techniques were achievement tests provided with textbooks (18% used frequently) and self-developed essay questions (26% used frequently), with 40% of interns rated as never using either. Although intuitively expected, no significant differences were found between elementary and secondary ratings of use of the techniques using t-tests on means with the Bonferroni method for multiple comparisons.

In terms of techniques related specifically to formative evaluation, assessment with opportunities for student corrections and improvement after teacher feedback was rated as used frequently by 61% of the interns and never used by 13%, suggesting that this type of assessment was used relatively often. On the other hand, indicators of progress over time were relatively infrequently used, with 44% rated as never using them and 43% as using them frequently.

Demonstrating an Impact on Student Learning

To examine answers to the open-ended question asking teachers to describe the methods their interns used to demonstrate their teaching had an impact on student learning, a coding scheme was developed by the first author to categorize responses. After categories were developed and refined, the second author was trained to use them using 16 teacher responses jointly coded. If the teacher listed more than one technique, a separate code was assigned to each. Both raters independently coded the remaining 90 responses, reaching 95% agreement. Discrepancies were resolved through discussion. See Table 3 for the descriptions of the 10 codes used.

The method listed most frequently to demonstrate that teaching had an impact on student learning was informal questioning or observation, without mention of written documentation, as shown in Table 3. Three-quarters of the teachers indicated that their interns had used such informal methods. More formal documentation in the form of tests or quizzes was employed by 44% of the interns to demonstrate impact. Also, one-third of the interns used homework and class assignments to demonstrate impact on student learning. Fewer than

10% of interns were reported as using performance assessment, portfolio assessment or opportunities for student improvement after feedback to demonstrate impact. These data suggest that teachers saw interns relying primarily on informal, unwritten methods for determining the effects of their instruction on student learning.

Discussion

These findings indicate that, on the whole, the supervising teachers believed that their interns had good assessment skills and used a variety of evaluation techniques. Informal methods such as oral questioning and guided practice appear to be the most frequent assessment methods used in the attempt to demonstrate an effect on student learning.

These results also offer clues and direction related to efforts to improve teacher candidates' assessment skills. As new performance standards for teacher education programs and teacher licensure become more performance-based, programs are responsible for demonstrating and documenting an impact on P-12 learning by teacher education candidates. The data from the current survey suggest that the predominance of informal methods may not be sufficient to prepare teachers to effectively assess student learning. Increasing candidates' skills at more formal documentation as to the effects of their instruction is an important future direction for teaching assessment proficiency in colleges of education. For example, documenting progress over time may require more systematic, quantifiable measures than the currently used informal

ones (Fuchs & Fuchs, 1986). Forty-four percent of the interns were rated as never having used such indicators of progress over time.

In addition, more formal documentation of examples of explicit use of assessment data for modifying instruction would be useful to highlight student progress over time as well as the interplay between assessment and instruction. Furthermore, assessment techniques that have the capability of providing rich formative data, such as performance and portfolio assessment, were reported as used by fewer than 10% of the interns for documenting their impact. Increasing use of such methods can provide students with opportunities to better understand their learning goals and to take a more active role in their own assessment, elements crucial to effective formative assessment (Black and Wiliam, 1998).

Research has suggested that only half of the states require training in assessment for certification (Stiggins, 1999), and few teacher education programs require that undergraduates take an assessment course, resulting in practicing teachers feeling unprepared for classroom assessment demands (Stiggins, 1991; Wise, et al, 1991; Lomax, 1996). Given this context, the supervising teachers who rated the interns may not be completely familiar with the complexities of effective assessment. The fact that they rated interns high on assessment skills but primarily emphasized informal methods when looking for impact on P-12 learning suggests a somewhat incomplete perspective.

In addition, the fact that there were few differences between ratings of elementary and secondary interns' use of assessment suggests a potential lack

of complexity in describing the purpose and use of a variety of assessment techniques. For example, about half of both secondary and elementary teachers indicated that their interns used running records—a method for monitoring and documenting miscues during early reading instruction in the primary grades—suggesting a broader interpretation of the term. Other differences between elementary and secondary interns might be expected but did not materialize. For instance, one might assume more use of textbook tests and self-developed selection and essay items among secondary interns than among elementary interns.

In summary, the findings suggest that the supervising teachers believed that the interns possessed needed assessment skills. Further analysis suggests that additional, more sophisticated training will be needed by those working daily in classrooms to move in the direction of effective assessment practices that help students make progress. Assessment in the classroom is a difficult and complex process. Teacher education programs must consider this issue a priority, not only because of focus by accrediting bodies on performance-based assessment, but because it is necessary in helping teachers understand how students can achieve success. The results of this study also point out the need for further research on assessment that goes beyond questionnaire data to examine and advance actual classroom practices.

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Table 1

Assessment Skill Ratings by Supervising Teachers

Skill rated	M	SD	n
Developing assessments to document student learning	4.14	.88	106
Using assessment information to monitor progress of all students	4.15	.87	106
Using assessment information to modify instruction	4.02	1.12	106
Providing feedback to all students to correct mistakes and guide future learning	4.22	.94	106
Making accurate assessments of the effectiveness of lessons in attaining instructional goals	4.14	.90	106

Note. Ratings ranged from 1 (strongly disagree) to 5 (strongly agree).

Table 2

Mean Ratings of Interns' Use of Assessment Techniques

Technique	M	SD	n
Achievement tests provided with textbooks	.74	.75	106
Self-developed multiple choice, true-false, or matching items	1.18	.84	106
Self-developed essay questions	.85	.81	106
Self-developed written short answer questions	1.29	.80	106
Authentic assessment (applications using "real-world" tasks)	1.40	.73	106
Performance assessment (complex tasks with multiple elements to assess)	1.24	.75	106
Informal oral questions	1.93	.25	106
Systematic observation	1.24	.92	106
Guided practice	1.82	.45	106
Self-developed questions assessing student preferences	1.31	.82	106
Indicators of progress over time	.99	.94	106
Assessment with opportunities for student corrections and improvement after teacher feedback	1.48	.72	106
Running records	.96	.92	106

Note. Ratings ranged from 0 (never) to 2 (frequently).

Table 3

Methods to Demonstrate an Impact on Student Learning

Code	Description	Percent Using
01	Informal observation/ oral questioning without documentation (e.g., spot checking progress on projects or daily work without "official" grading, review sessions, guided practice).	76
02	Written informal documentation (e.g., running records, notes from conferences, anecdotal records, KWL charts)	21
03	Formal tests or quizzes, pre- and post-tests.	44
04	Homework/ class assignments that are collected and/or graded (e.g., math problems homework, journal checks, other samples of student work).	31
05	Individual student conferences (no mention of notes kept)	07
06	Opportunities for student correction and improvement after teacher feedback	03
07	Performance assessment with documentation; use of rubric or checklist	05
08	Portfolio assessment	05
09	Peer assessment	01
10	Intern did not use assessment	03

Note. Percentages add to more than 100% because teachers may have mentioned more than one method.